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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/710,921	11/09/2000	Rick Allen Hamilton II	AUS9-2000-0561-US1	5545
35525	7590	09/14/2004	EXAMINER	
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			DUONG, THOMAS	
			ART UNIT	PAPER NUMBER
			2143	

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/710,921

Applicant(s)

HAMILTON ET AL.

Examiner

Thomas Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-10, 12-20 and 22-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-10, 12-20 and 22-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office action is in response to the amendment filed on June 14, 2004. The amendment filed on June 14, 2004 has been entered and made of record. *Claims 2-10, 12-20 and 22-33* are presented for further consideration and examination.

Response to Argument

2. The Applicants' arguments and amendments filed on June 14, 2004 have been fully considered, but they are not persuasive.
3. With regard to claims 2, 12 and 22, the Applicants point out that:
 - *Thus, there is no teaching of scheduling execution of a plurality of commands in a programming order by encapsulation commands that have been selected from commands that otherwise execute concurrently, such that a first one of the plurality of commands in said order begin and complete executing prior to a second one of said commands in said order beginning executing, wherein said plurality of commands are executed sequentially in said programming order.*

However, the Examiner finds that the Applicants' arguments are not persuasive and maintains that the Blleloch reference does disclose:

- *encapsulating said first one of said plurality of commands in a first process and encapsulating said second one of said plurality of commands in a second process; (Blleloch, col.2, lines 29-60; col.2, line 61 – col.3, line 8; col.4, lines 21-59; Blleloch teaches of a method of data processing that first "determines tasks*

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available for scheduling and assigns a subset of these tasks to a system containing processing elements" to process the prioritized tasks (Blelloch, col.2, lines 43-46). Blelloch further teaches of each processing element sequentially performing the instructions of each task in its task buffer as long as there are task to be executed (Blelloch, col.2, lines 52-57). Since each of the tasks contains plurality of instructions, one of ordinary skill in the art can interpret that each task is an encapsulation of instructions that are to be executed sequentially)

In summary, the Examiner maintains that Blelloch does disclose a method of data processing that first "determines tasks available for scheduling and assigns a subset of these tasks to a system containing processing elements" to process the prioritized tasks (Blelloch, col.2, lines 43-46). Blelloch further teaches of each processing element sequentially performing the instructions of each task in its task buffer as long as there are task to be executed (Blelloch, col.2, lines 52-57). Since each of the tasks contains plurality of instructions, one of ordinary skill in the art can interpret that each task is an encapsulation of instructions that are to be executed sequentially.

Thus, one of ordinary skill in the art can interpret the Blelloch reference to have all of the limitations of the present claimed invention. Mainly, Blelloch teaches of selecting a subset of available tasks, prioritizing the selected tasks, assigning them to a processing element's task buffer, and having the processing element execute the instructions of each task sequentially before moving on to the next prioritized task. Therefore, the Applicants still failed to clearly disclose the novelty of the invention and identify specific limitation, which would define patentable distinction over prior art.

4. With regard to claims 3-10, 13-20 and 23-33, they are rejected at least by virtual of their dependency on the independent claims and by other reasons set forth in the previous office action. Accordingly, rejections for claims 3-10, 13-20 and 23-33 are presented as below:

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 2-10, 12-20 and 22-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Blelloch et al. (US006434590B1).

7. With regard to claims 2-4, 12-14, 22-24 and 31-33, Blelloch reference discloses,

- *selecting said plurality of commands from the environment which executes commands concurrently;* (Blelloch, col.1, lines 5-9, lines 12-15, lines 18-48, lines 51-63; col.2, lines 29-60; col.2, line 61 – col.3, line 8; Blelloch teaches of a method of data processing that first "determines tasks available for scheduling and assigns a subset of these tasks to a system containing processing elements" to process the prioritized tasks (Blelloch, col.2, lines 43-46). Blelloch further teaches of each processing element sequentially performing the instructions of each task in its task buffer as long as there are task to be executed (Blelloch, col.2, lines 52-57))

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- *scheduling execution of said selected plurality of commands in a programming order, said scheduling step comprising:*
 - *encapsulating said first one of said plurality of commands in a first process and encapsulating said second one of said plurality of commands in a second process; (Blelloch, col.1, lines 5-9, lines 12-15, lines 18-48, lines 51-63; col.2, lines 29-60; col.2, line 61 – col.3, line 8; Blelloch teaches of a method of data processing that first “determines tasks available for scheduling and assigns a subset of these tasks to a system containing processing elements” to process the prioritized tasks (Blelloch, col.2, lines 43-46))*
 - *beginning processing of said first process; (Blelloch, col.1, lines 5-9, lines 12-15, lines 18-48, lines 51-63; col.2, lines 29-60; col.2, line 61 – col.3, line 8; Blelloch teaches of a method of data processing that first “determines tasks available for scheduling and assigns a subset of these tasks to a system containing processing elements” to process the prioritized tasks (Blelloch, col.2, lines 43-46). Blelloch further teaches of each processing element sequentially performing the instructions of each task in its task buffer as long as there are task to be executed (Blelloch, col.2, lines 52-57))*
 - *executing said first one of said plurality of commands in response to said beginning processing of said first process, wherein said first one of said plurality of commands executes only while said first process is executing; (Blelloch, col.1, lines 5-9, lines 12-15, lines 18-48, lines 51-63; col.2, lines 29-60; col.2, line 61 – col.3, line 8; Blelloch teaches of a method of data processing that first “determines tasks available for scheduling and assigns a subset of these tasks to a system containing processing elements” to process*

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the prioritized tasks (Blelloch, col.2, lines 43-46). Blelloch further teaches of each processing element sequentially performing the instructions of each task in its task buffer as long as there are task to be executed (Blelloch, col.2, lines 52-57))

- o *and beginning processing of said second process only in response to a completion of processing of said first process.* (Blelloch, abstract; col.1, lines 5-9, lines 12-15, lines 18-48, lines 51-63; col.2, lines 29-60; col.2, line 61 – col.3, line 8; col.3, line 46 – col.4, line 20; col.4, lines 21-59; col.6, line 60 – col.5, line 21; col.8, line 60 – col.9, line 11; module 514-518, fig.5; fig.6-8; Blelloch teaches of a method of data processing that first “determines tasks available for scheduling and assigns a subset of these tasks to a system containing processing elements” to process the prioritized tasks (Blelloch, col.2, lines 43-46). Blelloch further teaches of each processing element sequentially performing the instructions of each task in its task buffer as long as there are task to be executed (Blelloch, col.2, lines 52-57))

8. With regard to claims 5-10, 15-20 and 25-30, Blelloch reference discloses,

- *further comprising the step of determining whether said first process is currently executing.* (Blelloch, abstract; col.1, lines 5-9, col.9, lines 14-40; col.10, lines 35-64; col.13, lines 46-65; col.14, lines 21-42; fig.5-8)
- *establishing a return code variable; and utilizing said return code variable to indicate whether said first process is currently executing.* (Blelloch, abstract; col.1, lines 5-9, col.9, lines 14-40; col.10, lines 35-64; col.13, lines 46-65; col.14, lines 21-42; fig.5-8)

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- *assigning a first process identifier to said first process; and utilizing said first process identifier to determine whether said first process is currently executing.*
(Blelloch, abstract; col.1, lines 5-9, col.9, lines 14-40; col.10, lines 35-64; col.13, lines 46-65; col.14, lines 21-42; fig.5-8)

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 703/305-1886 or 571/272-3911 (after 11/01/2004). The examiner can normally be reached on M-F 7:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 703/308-5221 or 571/272-3923 (after


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11/01/2004). The fax phone numbers for the organization where this application or proceeding is assigned are 703/872-9306 for regular communications and 703/872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703/305-3900 or 571/272-2100 (after 11/01/2004).

Thomas Duong (AU2143)

September 10, 2004


JACK B. HARVEY
SUPERVISORY PATENT EXAMINER